WESTERN WASHINGTON AMATEUR RELAY ASSOCIATION, INC.

COORDINATION POLICIES AND PROCEDURES

INTRODUCTION

The WWARA is a voluntary association of amateur radio operators, relay system owners and interested parties. The Association has collectively determined that the coordination of relay systems is essential to maximize the finite spectrum resources allocated to amateur radio and minimize the interference between systems. The success of the Association is solely dependent on those amateurs who actively cooperate and participate in spectrum management and contribute to the coordination processes.

It is not the intent nor the obligation of the WWARA to act as a spectrum enforcer ensuring coordination compliance, rather it is the obligation of the individual coordination holder to ensure their system's coordination compliance and to provide updated and timely information when necessary.

All parties must realize that the amateur spectrum is a fragile resource and abuse can spoil it for everyone now and in the future. Voluntary coordination by its name implies cooperation. Any party wishing to develop and operate a relay system should feel obligated to seek the synergy of existing relay system operators through WWARA coordination, prior to placing any relay system in operation. Coordinated amateurs have the full support of other coordinated amateurs.

The FCC has stated that where the transmission of a repeater causes harmful interference to another repeater, the two station licensees are equally and fully responsible for resolving the interference unless the operation of one station is recommended by a frequency coordinator and the operation of the other station is not. In that case, the licensee of the non-coordinated repeater has the primary responsibility to resolve the interference.

The WWARA will accept application from any duly licensed individual or amateur group and will issue a Certificate of Coordination based on the following policies and procedures. However the WWARA reserves the right to deny requests for Certificate of Coordination to applicants who refuse to abide by these WWARA Coordination Policies and Procedures.

The WWARA does not issue Certificates of Coordination, channelize, or attempt to create band plans for simplex frequencies falling outside the area reserved for repeater inputs or outputs.

The boundaries of the WWARA coordination responsibility are:

north - The Border

east - The Cascade Crest

south- The southern boundary of the WWARA is on the West of the Oregon Washington border eastward up the Columbia river to a point just north of Woodland, then eastward through I-5 exit #21 to the Lewis river then eastward to its beginning then eastward to the Cascade Crest.

west - Pacific Ocean

REPEATER COORDINATION PARAMETERS AND GUIDELINES

All coordinated frequencies are for a specific:

a. Frequency(s)
b. Transmitter location (latitude and longitude)
c. Effective Radiated Power
d. Radiation pattern (directional, non directional*, etc.)
e. Elevation (AMSL, AGL, HAAT)
f. Individual or designated individual (4/93)
g. Access (12/94)
h. Period of Time

This information is considered public information.

*Use of directional antennas may be an essential part of any given coordination

All new Certificate of Coordinations shall indicate the use of continuous tone(s)(CTCSS, DPL, Frequency Shift Data, etc.) as a means of system access except where an applicant can demonstrate that COS operation will no cause interference. Other means of limiting access like DTMF or cheap beep are not acceptable.

The following are guidelines for sharing repeater pairs:

a. Harmful interference which endangers the functioning of radio navigation service or of other safety services or seriously degrades, obstructs or repeatedly interrupts a radio communication service operating in accordance with the Radio Regulations. Hearing the output of another cochannel repeater in the frequency of a system not in use is not interference.

b. Overlap is based on a 25 watt or less mobile using a gain antenna bringing up more that one system over a large area.

c. No fixed mileage separation criteria can be used between co-channel or adjacent channel system.

d. Receiver coverage of a repeater is a large factor in determining the coverage of a system. Those systems with a number of voting receivers, receivers at elevations higher than the repeater transmitter or system operating with excessive transmitter power will not have extended coordination protection.

e. Repeater DX'ing by users may cause unintended interference to co-channel systems but is not a matter for WWARA action.

ACCESS, HEIGHT, POWER, FREQUENCY OR LOCATION CHANGES

Coordination is based on information provided by the applicant and contained on the WWARA Technical Data Sheet. If a coordination holder significantly changes the location, access, antenna height or pattern, effective radiated power, frequency, or other operating parameters of his system, the repeater will be required to be re coordinated. The WWARA secretary shall be notified in writing on the appropriate form. Recordination is required to verify that interference to or from other repeaters does not occur. Recoordination is not to allow another repeater or proposed repeater to be assigned to the frequency.

Note: Significantly shall be a power change of 1 db, an antenna height change of more that 25 feet or a horizontal move of more than 1500 feet. For the 1db power change the WWARA uses a

factor of .75 or 1.25 of the original power. For example a 100 watt ERP station multiplied by .75 would be 75 watts, or multiplied by 1.25 would be 125 watts.

PROCESSING FEES

All applicants seeking a Certificate of Coordination shall pay a non refundable Application Processing Fee.

Certificate of Coordination holders wishing to renew their Certificate of Coordination or transfer their Certificate of Coordination shall pay a renewal processing fee.

APPLICATION FOR COORDINATION

An applicant for coordination may select or request a certain frequency.

All applicants requesting a Certificate of Coordination may appeal the decision of the Board through the formal grievance procedure.

On bands where coordinatable frequencies are available coordination requests shall be acted upon on a first come, first serve basis.

In the case of mutually exclusive applications for coordination, the WWARA shall weight its decision based on the following:

a. Duplication of coverage of an existing system on the same band.
b. Coverage of a non served area.
c. Potential for interference.
d. Number of existing Certificates of Coordination held and operated by the applicants.
e. Proposed operation of an open rather than a closed system.

Prior to placing a repeater in operation;

1. The applicant submits, in writing, a request to the Secretary.
2. The Secretary responds with:
    a. An outline of the application process and the fee schedule
    b. A Technical Data Form
    c. A copy of the Coordination Standards / Policies and by-laws.
    d. Copies of the appropriate band plans.
    e. Procedure to obtain the latest public version of the WWARA Data Base.

3. The applicant returns the appropriate processing fee to the Secretary, a completed Technical Data Form, co-channel letters and any other pertinent supporting information.

4. The Secretary forwards the application to the band coordination committee.

5. The coordination committee recommends a frequency and other parameters pursuant to the Coordination Policies, considering the effect on adjacent areas *and establishes a testing period to prove or disprove the suitability of the recommend frequency.*

6. In the event that the entire Board must act as the Band Coordination Committee or when unresolved issues are involved, the matter will be discussed at the next meeting of the WWARA.

7. The Secretary issues the Certificate of Coordination to the applicant or notifies the applicant by mail as to the result of the Associations action.

The Certificate of Coordination is based on all data available to the WWARA at the time the Certificate is issued. A Certificate of Coordination is not a guarantee of a clear frequency. The suitability of the frequency(s) shall be the responsibility of the applicant.

Applicants proposing co-channel operation with an existing established system shall:

1. Make reasonable attempts to obtain cochannel letters of authorization from current Certificate of Coordination holders on the frequency. (This requirement may be waived by the Band Chairman for the initial test period, if in his/her opinion, the existing Certificate of Coordination holder will not be affected).

2. If such authorization cannot be obtained, the Band Chairman may recommend to the Board, a test period to prove or disprove adverse interference to the current Certificate of Coordination holder or users.

3. Based on 1 and 2 above, the Board will make final determination regarding permanent cochannel assignment.

The WWARA reserves the right to:

a. Deny requests for Certificate of Coordination in congested bands or require the use of less congested bands.
b. Set aside frequencies for certain operating modes.
c. Limit antenna height and ERP.
d. Require special methods of access as a prerequisite for a Certificate of Coordination.

CONSTRUCTION PERIOD

The initial Certificate of Coordination is for a 6 month period. It is the responsibility of the applicant to notify the WWARA immediately when the frequencies are activated. Thereafter Certificates of Coordination are issued for a five year period of time.

RESPONSIBILITY OF COORDINATION HOLDER

It is the responsibility of the Certificate of Coordination holder to keep the WWARA informed as to the status of the system by having an up to date technical data form on file with the secretary at all times.

Absent special circumstances, any correspondence from the WWARA shall be directed to the Certificate of Coordination holder. To facilitate this correspondence the address stated for the Certificate holder must be his/her home or personal post office box.

Where an organization is the sponsor of a repeater, the Certificate of Coordination holder for such a repeater must be an individual of proper amateur radio license class appointed by the organization. Notification of any change of the Certificate of Coordination holder or system status must by WWARA Technical Data form submitted and signed by the chief officer of such organization.

All communication regarding coordination shall be in writing. Verbal communication shall not be binding. It is the Certificate of Coordination holder's responsibility to insure the WWARA is in receipt of any correspondence.

CANCELLATION OF COORDINATION

Any significant station parameter change, as specified on the Certificate of Coordination, made without prior approval by the WWARA shall result in cancellation of the Certificate of Coordination. (see ACCESS, HEIGHT, POWER, FREQUENCY OR LOCATION CHANGES)

The WWARA shall cancel a Certificate of Coordination as follows:

a. For failure to notify the WWARA within 6 months of the initial issuance of the Certificate of Coordination, or extension thereof, as to the status of the system.
b. For failure to occupy and utilize the frequencies as described by the Certificate of Coordination for a period of 6 months without the approval of the WWARA.
c. For operation in violation of WWARA coordination policies.
d. For not operating in accordance with established WWARA band plans.
e. For any system known to be operating in violation of FCC rules.
f. For failure to renew a Certificate of Coordination prior to its expiration using a completed WWARA Technical Data Form. This form must be kept current and updated at least every five years.

The Data Base Manager as a courtesy will on a semi-annual basis publish all Certificate of Coordinations due to expire within the next 6 months in the "Coordinator". No further notice will be given to the Certificate of Coordination holder. It is the sole responsibility of the Certificate of Coordination holder to monitor and renew its Certificate.

A six month grace period will exist after a certificate expires wherein the holder may renew the certificate by reapplying using a WWARA Technical Data Form and paying an *Application Processing Fee*.

The Secretary shall notify the coordination holder of the violation / failure to comply via mail. If a written reply is not received within 30 calendar days, delineating the corrective action to be taken to bring the system into compliance, the Certificate of Coordination will be automatically canceled.

TRANSFER OF COORDINATION

A Certificate of Coordination of an existing frequency can be transferred to another individual or group provided:

a. Both parties are in agreement.
b. The new proposed Certificate of Coordination holder agrees to abide by the WWARA Coordination Polices and Procedures, pays a Renewal Processing Fee and applies to the WWARA for same.
c. There are no reasonable objections to the transfer.
d. There will be no changes in the operating parameters of the system coordination parameters.
e. The new Certificate of Coordination will be issued to the new holder for a five year period.

DIGITAL COORDINATION

The following is the WWARA policy regarding Packet Radio Systems:

a. The WWARA shall not attempt to issue Certificate of Coordination to any digital systems, except when the proposed system requires;
    1. Use of a standard repeater pair or link frequencies.
    2. Use of spectrum previously and or historically coordinated for non-packet relay systems lying outside of established and recognized Packet Radio spectrum.

b. The WWARA shall protect existing co-site and adjacent frequency repeater from the effects of system performance degradation caused by Packet Radio Systems. Conventional FCC interference criteria will be used to determine degradation.

c. The WWARA shall work with the ARRL, regional coordination organizations, as well as local and regional Packet Radio organization in the development of band plans that will set out specific band for Packet Radio communications.

d. The WWARA shall not make any attempt to "list" or other wise recognize any DIGI/Packet system and or frequency of operation in its data base or publication other than those system that utilize standard band plan frequencies and have a valid Certificate of Coordination.

SHARED NON PROTECTED REPEATERS

The WWARA has established several Shared Non Protected (SNP) repeater pairs. SNP systems must be registered by frequency and CTCSS tone. This form must be kept current and updated at least every two years. Other guidelines for the use of these frequencies are:

a. All user of these frequencies shall share the use of same.
b. User receive no protection from other cochannel users.
c. All systems shall use CTCSS access or other approved methods of limited access.. No COR operation of any kind is permitted. The WWARA shall keep track of the CTCSS codes in use to avoid duplication and to make this information available to all those requesting the same.
d. Operation of SNP systems shall be on a non-interference basis with existing coordinated systems.
e. Use of SNP frequencies shall be restricted to voice, non-data and non-linked modes.
f. The SNP pairs using standard frequency paring are:
    6 meters 51.19 - 52.99
    2 meters 144.53-145.13 and 144.69 - 145.29
    222 MHz 223.12 - 224.72 and 223.24 - 224.84
    440 MHz 445.00 - 440.00 and 448.00 - 443.00
g. Power limitations (elevations in AMSL, Power is ERP in Watts)
    0-500' - 20 Watts
    501 - 1000' - 10 Watts
    1001 and greater may be approved on a case by case basis by the WWARA.

BAND PLANS

The following 440 MHz frequencies have been reserved or control link application: 441.500 to 441.600 and 446.500 to 446.600. The CTCSS tone shall be assigned by the Uhf Band Chairman.
Note: Our Band plans should be inserted here

GRIEVANCE PROCEDURE

Any applicant requesting a Certificate of Coordination for a frequency who has been denied by the Board may appeal the Boards decision using one or both of the following procedures.

1. The applicant may appeal the decision of the Board by submitting a written request to the Secretary stating that the applicant would like to bring additional information and argument to the attention of the Board. The Secretary shall schedule time during the next regular Board meeting for the applicant to present his / her argument for reconsideration by the Board. After hearing all pertinent information the Board shall vote on the applicants appeal. The simple majority vote by the Board shall determine the outcome.
2. The applicant may appeal the decision of the Board to the regular members who are Certificate of Coordination holders by submitting a written request to the Secretary stating that the applicant wishes to appeal the decision of the Board to the regular membership. The Secretary will request from the applicant that he/she supply in writing all argument and information relating to the matter for dissemination to the membership. The Secretary shall ask the Board to supply in writing all argument and information used in determining the reason for denial, also for dissemination to the membership. After receiving the requested information, the Secretary shall determine the cost for reproducing and mailing the information to the membership. One half of this cost must be submitted by the appellant prior to the Secretary proceeding with the appeal. The other one half of the cost will be paid from WWARA funds. The Secretary will then reproduce all material and disseminate the material along with instruction and a voting card to all current regular members holding a valid Certificate of Coordination from the WWARA. The members will be instructed to read the materials and indicate their decision on the voting card. The outcome will be determined by the simple majority of the cards returned.